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10/500,712

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Juha-Pekka Koskinen

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06/09/2009

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EXAMINER

NGUYEN, TUAN HOANG

ART UNIT

PAPER NUMBER

2618

MAIL DATE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|--|--|
| Office Action Summary | Application No. 10/500,712 | Applicant(s) KOSKINEN ET AL. | |
| | Examiner TUAN H. NGUYEN | Art Unit 2618 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 March 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 26-52 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 26-52 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 03/23/2009 has been entered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1, 26-27 and 43-47 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claims 1, 26-27 and 43-47 are recited the limitation "... establishing **the accounting session**... allocating an accounting session identifier..." is never mention in the body of the claim until the end of it. There is insufficient antecedent basis for this limitation in the claims.

5. Claims 13-25 cancelled.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-5, 10-12, 26-30, 35-37, 42-47, and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lippelt (US PUB. 2005/0136890) in view of Cobo et al. (U.S PAT. 6,496,690 hereinafter "Cobo") and further in view of Campbell (U.S PAT. 6,453,029).

Consider claims 1, 26, 27, and 43-47, Lippelt teaches a request to establish the call between a first terminal and a second terminal, are to be charged against the prepaid credit (page 1 [0007] and page 2 [0015]).

Lippelt does not explicitly show that establishing the accounting session and allocating an accounting session identifier to the accounting session based on receiving a request to establish an accounting session between an accounting server and at least one accounting client that will generate costs to be charged against prepaid credit during a call after ascertaining whether any costs generated by the at least one accounting client in a network.

In the same field of endeavor, Cobo teaches establishing the accounting session and allocating an accounting session identifier to the accounting session based on receiving a request to establish an accounting session between an accounting server and at least one accounting client that will generate costs to be charged against prepaid credit during a call after ascertaining whether any costs generated by the at least one accounting client in a network (figs. 2 and 3, col. 6 lines 31-49).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use, establishing the accounting session and allocating an accounting session identifier to the accounting session based on receiving a request to establish an accounting session between an accounting server and at least one accounting client that will generate costs to be charged against prepaid credit during a call after ascertaining whether any costs generated by the at least one accounting client in a network, as taught by Cobo, in order to provide a prepaid subscriber service to a mobile subscriber in a wireless packet-switched telecommunications network.

Lippelt and Cobo, in combination, fail to teach collating the-charging update data in the accounting server based on the accounting session identifier and the charging update data at the accounting server received from the at least one accounting client during the call established between the first and second terminals, to enable updating of the prepaid credit during the call, wherein the charging update data received during the call includes the accounting session identifier and tariff update data.

However, Campbell teaches collating the-charging update data in the accounting server based on the accounting session identifier (col. 6 lines 33-47) and the charging

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update data at the accounting server received from the at least one accounting client during the call established between the first and second terminals (col. 4 line 58 through col. 5 line 21), to enable updating of the prepaid credit during the call, wherein the charging update data received during the call includes the accounting session identifier and tariff update data (col. 4 line 58 through col. 5 line 21).

Therefore, it is obvious to one of ordinary skill in the art at the time the invention was made to incorporate the disclosing of Campbell into view of Lippelt and Cobo, in order to provide database servers and call processors are distributed to a number of remote locations. Instead of routing all of the users through a central system, in the present invention the prepaid callers are serviced by local call processors that are coupled to the remote servers. The use of local call processors at the remote locations reduces the call volume that is handled by each call processor and server. As a result, the demand levels on each call processor and server are reduced. Thus, the present system works faster and more efficiently.

Consider claims 2 and 28, Campbell further teaches there are a plurality of accounting clients that generate costs in relation to the call, the method further comprising: establishing accounting sessions between each respective accounting client and the accounting server, each of the accounting sessions being allocated a common accounting session identifier associated with the call to be established (col. 6 lines 33-47); receiving charging update data from each of the accounting clients to the accounting server during the call, the charging update data including the accounting session identifier (col. 4 line 58 through col. 5 line 21); and collating the charging update

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data from each of the accounting clients based on the accounting session identifier, thereby enabling updating of the prepaid credit during the call (col. 4 line 58 through col. 5 line 21).

Consider claims 3 and 36, Lippelt further teaches the accounting server is located in the home network of the first terminal (page 1 [0012]).

Consider claims 4 and 29, Cobo further teaches each accounting client takes the form of one of the following network entities: service general packet radio service support node/ gateway general packet radio service support node; service call service control function/ proxy call service control function; and a network application server (col. 4 line 65 through col. 5 line 12).

Consider claims 5, 30, 37, and 50, Lippelt further teaches the accounting session identifier is allocated upon receipt in the network of the request for establishment of a call from the first terminal (page 6 [0058]).

Consider claims 10, 35, and 42, Lippelt further teaches in response to receiving a request for ascertaining whether costs are to be charged against prepaid credit the method further comprises looking up subscriber profile data upon receipt of the request for establishment of the call (page 3 [0028]).

Consider claim 11, Lippelt further teaches the network is an internet protocol network (page 5 [0056]).

Consider claim 12, Lippelt further teaches the network is a universal mobile telecommunications system network (page 5 [0048]).

Consider claim 48, Lippelt further teaches in response to receiving the request for ascertaining, transmitting a response including an indication that costs generated by accounting clients in a network associated with a request for establishing a call between a first and second terminal are to be charged against prepaid credit (page 1 [0007] and page 2 [0015]).

Consider claim 49, Lippelt further teaches the apparatus comprises a transmitter configured to transmit a response including an indication that costs generated by accounting clients in a network associated with a request for establishing a call between a first and second terminal are to be charged against prepaid credit in response to the request for ascertaining (page 1 [0007]).

8. Claims 6-9, 31-34, 38-41, and 51-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lippelt in view of Cobo and Campbell and further in view of Chaney (U.S PAT. 6,947,724).

Consider claims 6, 31, and 38, Lippelt, Cobo and Campbell, in combination fails to teach the request for establishment of a call is made via a session initiation protocol message sent from the first terminal.

However, Chaney teaches the request for establishment of a call is made via a session initiation protocol message sent from the first terminal (col. 1 lines 16-39).

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Therefore, it is obvious to one of ordinary skill in the art at the time the invention was made to incorporate the disclosing of Chaney into view of Lippelt, Cobo and Campbell, in order to provide billing a call placed by a user based on a reported traffic load in the network.

Consider claims 7, 32, 39, and 52, Chaney further teaches the charging update data is sent from the accounting clients to the accounting server via a diameter protocol message (col. 8 lines 1-6).

Consider claims 8, 33, and 40, Chaney further teaches the charging update data is received from each accounting client to the accounting server in response to a diameter protocol update request issued by the accounting server (see fig. 5 col. 8 lines 7-14).

Consider claims 9, 34, 41, and 51, Chaney further teaches the accounting server issues the update requests to each accounting client periodically (col. 8 lines 43-53).

Conclusion

9. Any response to this action should be mailed to:

Mail Stop_____ (Explanation, e.g., Amendment or After-final, etc.)

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Facsimile responses should be faxed to:

(571) 273-8300

Hand-delivered responses should be brought to:

Customer Service Window

Randolph Building

401 Dulany Street

Alexandria, VA 22313

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan H. Nguyen whose telephone number is (571) 272-8329. The examiner can normally be reached on 8:00Am - 5:00Pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Maung Nay A. can be reached on (571) 272- 7882. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Tuan H. Nguyen/
Examiner
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